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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,109	06/26/2003	Milton Bernard Hollander		3632

7590 01/28/2005

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EXAMINER	
JAGAN, MIRELLYS	

ART UNIT	PAPER NUMBER
2859	

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/607,109	HOLLANDER ET AL.	
	Examiner	Art Unit	
	Mirellys Jagan	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *87* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *87* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *6/26/03* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the device having a beam splitter used with at least one of the individual lasers, as claimed in claim 87, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 87 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 87 claims a temperature-measuring instrument having separate spaced apart independent lasers each directing a laser beam onto the target surface, which is supported by the original disclosure, e.g., in figures 14-16, and paragraphs 54. However, claim 87 further claims that there is a beam splitter illuminated by at least one of these individual lasers so that the at least one laser projects more than two laser light spots, which is not supported by the original disclosure. The original disclosure fails to disclose a beam splitter being used with at least one of the lasers of the claimed embodiment (shown in figures 14-16).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over German Reference 19528590 to Schmidt et al [hereinafter Schmidt] in view of U.S. Patent 5,836,694 to Nguyen.

Schmidt discloses a temperature measuring instrument comprising:

a radiometer having a field of view on a measurement area;

a laser for aiming the radiometer at the area, the laser directing a visible laser beam onto a beam splitter to project a pattern of more than two laser light spots onto the measurement area to indicate the field of view (see figures 1 and 2B). Schmidt teaches that it may be useful to provide a spot of light at the center of the field of view, if so desired.

Schmidt does not explicitly disclose the radiometer laser and splitter all mounted on a common support, and does not disclose using another individual laser for generating another laser beam to identify the field of view.

Nguyen discloses a temperature-measuring instrument comprising a radiometer and a laser all mounted on a common support to allow a user to properly manipulate the instrument toward a target being measured. The instrument uses a laser for emitting a light beam to mark the center of the field of view of the radiometer on the target in order to more accurately position the instrument (see figure 2; column 6, lines 34-48).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the instrument of Schmidt by adding another laser to generate a spot at the center of the field of view, as taught by Nguyen, in order to better visualize the measurement area to more accurately position the instrument, and since Schmidt teaches that it is desirable to mark the center of the field of view when indicating the field of view.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the instrument of Schmidt by mounting all of the elements on a common support, as taught by Nguyen, in order to facilitate manipulating and aiming the instrument toward the measurement area.

Response to Arguments

6. Applicant's arguments filed 12/20/04 have been fully considered but they are not persuasive. Applicant's arguments that support for claim 87 is found in figures and paragraphs of U.S. Patent 5,823,678 are not persuasive since the rejections are based on the present application. It appears that Applicant's arguments refer to figures and paragraphs in the present application instead of the above mentioned U.S. Patent, therefore the Examiner will refer to the figures and paragraphs in the present application when considering the Applicant's arguments.

Referring to Applicant's arguments that support for claim 87 is found in figure 5 and paragraphs 45 and 74 are not persuasive since figure 5 and paragraph 45 disclose a single laser (312), which is provided with optic fibers to split a single beam into plural individual beams. Paragraph 74 states that the one laser and optic fiber combination can be replaced with individual lasers, and that two lasers may be used to project two laser beams on different sides on the energy zone, which is not shown in figure 5 (this embodiment is shown in figures 14-16). However, none of figure 5 and paragraphs 45 and 74 disclose claim 87 since none disclose using the combination of a beam splitter and at least one of the individual lasers for indicating the field of view of the radiometer, as claimed.

Referring to Applicant's arguments that support for claim 87 is found in figure 18 (incorrectly referred to as figure '17' in the arguments) and paragraphs 33 and 34 are not persuasive since figure 18 shows a single laser split into the plural beams by using a diffraction element; paragraph 33 states that the laser pattern of plural spots is formed by: 1) splitting the laser beam into the plurality of beams using optic fibers (as shown in figure 5), a diffraction device (as shown in figure 18), or beam splitters, or 2) by using a plurality of lasers (as shown in figures 14-16); and paragraph 34 states that the laser pattern of plural spots is formed by: 1) providing a dedicated laser to each beam (as shown in figures 14-16), or by means of beam splitters such as mirrors, optics, diffraction grating (as shown in figure 18), and optic fibers (as shown in figure 5). However, none of figures 5, 14-16, 18, and paragraphs 33 and 34 disclose claim 87 since none disclose using the combination of a beam splitter and at least one of the individual lasers for indicating the field of view of the radiometer, as claimed.

Referring to Applicant's arguments that support for claim 87 is found in paragraph 3 are not persuasive since, although paragraph 3 states that "at least one laser beam is subdivided by passing it through a diffraction grating" [emphasis added], the rest of the disclosure fails to disclose: 1) more than one laser beam being passed through a diffraction grating to split them into the laser pattern of plural spots, or 2) each of more than one laser beam being passed through a corresponding diffraction grating to split each laser beam into a laser pattern of plural spots. The disclosure only teaches and discloses passing one laser beam through a diffraction grating to split the one beam into the plural beams, or using individual lasers to produce each of the plurality of beams. Therefore, paragraph 3 fails to disclose using the combination of a beam

splitter and at least one of the individual lasers for indicating the field of view of the radiometer, as claimed.

Referring to Applicant's arguments that support for claim 87 is found in paragraph 38 are not persuasive since, although paragraph 3 states that "Two or more embodiments may be used together or alternately." the rest of the disclosure fails to disclose which two embodiments are being referred to. The rest of the disclosure states that the plurality of beams are formed by passing one laser beam through a diffraction grating/beam splitter/optic fiber to split the one beam into the plural beams, or using individual lasers to produce each of the plurality of beams. It appears that the combination of embodiments referred to by paragraph 38 refers to the using the beam splitting means, e.g., diffraction grating/beam splitter/optic fiber as alternative means for splitting the single beam, and not combining the beam splitting means with the individual lasers since such a combination will create a pattern different from the disclosed pattern of plural spots, e.g., combining a beam splitter with one of the individual lasers of figures 14-16 will result in a pattern where there is a circular pattern formed in front of the one laser and a second remote light spot formed in front of the other laser; and combining a beam splitter with each of the individual lasers of figures 14-16 will result in a pattern where there is a circular pattern formed in front of each laser (two non-concentric circular patterns). Therefore, paragraph 38 fails to disclose using the combination of a beam splitter and at least one of the individual lasers for indicating the field of view of the radiometer, as claimed.

Applicant's arguments that figures 14 and 18 can be used together, as suggested by paragraph 38, are not persuasive since replacing one of the lasers of figure 14 with the laser and beam splitter of figure 18 will result in a pattern as described in the preceding paragraph, i.e.,

replacing one of the lasers of figure 14 with a laser and beam splitter shown in figure 18 will result in a pattern where there is a circular pattern formed in front of the laser and beam splitter and a second unrelated light spot formed in front of the other laser; and replacing each of the lasers of figure 14 with a laser and beam splitter as shown in figure 18 will result in a pattern where there is a circular pattern formed in front of each laser and beam splitter (two non-concentric circular patterns). Furthermore, paragraph 93 states that figure 18 shows one radiometer is used with a single laser beam generator (1402) that is split by an optical component (1405) to form the plurality of beams (1403). The disclosure fails to state that additional laser beam generators (1402) with an optical component (1405) are used in combination with the one radiometer of figure 18, as suggested by applicant.

Furthermore, it is noted that the invention of claim 87 is not disclosed in any of the parent applications of this case, i.e., none of U.S. Patents 5,368,392; 5,524,984; 5,727,880; 5,823,678; 5,823,679; 6,267,500; 6,540,398; and 6,659,639 disclose using the combination of a beam splitter with at least one of the individual lasers for indicating the field of view of the radiometer, as claimed. Therefore, the effective filing date for claim 87 for applying the prior art above is the filing date of this application: 6/26/03.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents and publication disclose a laser-directed radiometer:

U.S. Patent 5,839,829 to Litvin et al

U.S. Patent 6,095,682 to Hollander et al

U.S. Patent 6,196,714 to Bellifemine et al

U.S. Patent 6,234,669 to Lienitz et al

U.S. Patent 6,280,082 to Aoyama et al

U.S. Patent 6,377,400 to Hollander

U.S. Patent 6,290,389 to Schmidt et al

U.S. Patent Application Publication 2002/0048307 to Schmidt

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mirellys Jagan whose telephone number is 571-272-2247. The examiner can normally be reached on Monday-Friday from 11AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ
January 21, 2005

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